

Richmond Refinery LPS Bulletin – Safety



Employee Injury during Oil Spill drill



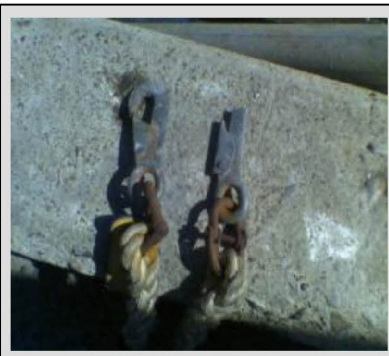
IPS Control: 1626669

Location: Richmond Refinery

Contact Information:

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Reference: TapRoot
Investigation IPS 1626669



Snap hook before and after failure.



New technique using knots only. Here showing an anchor bend knot.

IIF message – Proper Care and treatment of the injured employee and the continued safety of the responders was the primary concern after the injury occurred. Each responder and member of the investigation team recognized that although one of our fellow employees was injured it could have been far worse. This fact was discussed and was part of the overall investigation.

Incident Description:

On Thursday, September 10th, 2009, at approximately 15:00, a Chevron Emergency Response Team member was injured while conducting Oil Spill boom deployment drills at the Richmond Long Wharf.

A 25 ft tow line, under tension, was attached to a section of deployed boom with a snap hook and tied off to the vessel's tow-post located at the stern, aft of the pilot house. The firefighter was standing near the tow-post as the boom was being towed. The metal snap-hook attached to the boom anchor point failed causing the line to recoil back towards the boat and strike the firefighter which caused serious injuries to his left forearm.

Chevron EMTs were on the boat and treated the injured firefighter. An ambulance was called and transported the injured firefighter to a hospital for further treatment.

Investigation Findings:

- 1) Spill response vessel, along with four other boats, were in the process of retrieving previously deployed boom as part of a training exercise.
- 2) Boom was being pushed against the Tank Vessel due to an incoming tide.
- 3) The response vessel began towing boom away from the Tank Vessel during boom retrieval operations. As the tow line became taut the snap hook failed at the boom and the line with the broken snap hook recoiled back to vessel injuring the crew member.

Lessons Learned / Business Practices:

- 1) Include specific line-of-fire safety discussion in classroom training.
- 2) Include line-of-fire safety briefing in the pre-sail safety checklist.
- 3) Implement oil spill response industry standard technique without snap hooks for all towing and anchoring by training appropriate personnel to use two basic knots.

What Worked Well:

- 1) A well stocked onboard First Aid Kit and Emergency Medical Technicians allowed for a quick and thorough medical response.

Recommendations:

- 1) Discontinue using any snap hooks for towing/anchoring in marine environments.

Tenets of Operations Violated: Richmond Refinery

- 1) Always operate within design and environmental limits.

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